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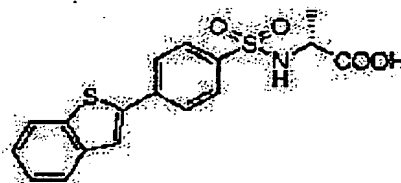
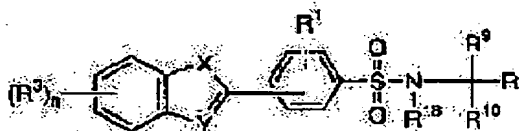
(71)Applicant : ONO PHARMACEUT CO LTD
 (72)Inventor : TAKAHASHI KANJI
 SUGIURA TSUNEYUKI

(54) PHENYLSULFONAMIDE DERIVATIVE

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain the subject new compound having an inhibitory effect against matrix metalloproteinase (e.g. gelatinase and collagenase) and useful for the prevention and/or treatment of rheumatism, osteoarthritis, osteoporoses, etc.

SOLUTION: The subject compound is a phenylsulfonamide derivative of formula I [R¹ is H or a 1-4C alkyl; R² is COOR⁴ (R⁴ is H, a 1-8C alkyl, etc.), etc.; R³ is H, a 1-4C alkyl, a halogen, etc.; (n) is an integer of 1-4; R⁹ and R¹⁰ are each independently H, a 1-8C alkyl, etc.; R¹⁸ is H, a 1-4C alkyl, a 1-8C alkoxy carbonyl, etc.; X is O atom, S atom, etc.; Y is CH or N atom] or a nontoxic salt thereof, and for example, N-[4 -(2-benzothieryl) phenylsulfonyl] -D-alanine of formula II is cited. The compound of formula I is obtained by using a corresponding heterocyclic compound with a t-butyl ester (hydrochloride) of a corresponding amino acid by the well-known method.



LEGAL STATUS

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